**Worksheet 8C- Residuals**

Ungroup the group PIKETOLL. You will have lists MILE and TOLL. This is the mileage traveled by drivers on the PA turnpike and the Toll that they paid (in dollars).

1. Create a scatterplot of Mile (x) versus Toll (y) below. Describe the plot.
2. Calculate the LSR line, r and r2. Add the line to the plot.
3. Do you think line does a good job of describing our data?
4. Create a residual plot. Sketch it below.
5. Using the residual plot, is the line the BEST model for our data? Why?
6. But (based on our original scatterplot) is our line a GOOD model for our data?
7. Interpret the slope of the LSR line
8. Interpret the r2.